



EMBASSY OF THE UNITED STATES
AMMAN· JORDAN



April 1 – April 29, 2010: Hub Activities Report

NEA Environment, Science, Technology and Health (ESTH) Hub - Manu Bhalla

U/S Otero Visit to Jordan: I served as the control officer for U/S Otero's April 17-19 visit where she met Jordan's political leadership, engaged representatives from civil society and youth leaders, and also visited a processing center for Iraqi's who would be resettled in the U.S., as well as an NGO which helps TIP victims. Her visit also focused on water issues and the U/S met with the Minister of Water and Irrigation and USAID Jordan, and visited the Al Samra Wastewater treatment plant:

- **The Al Samra wastewater treatment plant** provides wastewater treatment services for almost 2 million people residing in Amman and Zarqa. The U/S was given a comprehensive briefing and tour of the impressive facility, which was the first public-private partnership (PPP) in Jordan, financed with USAID and private sector support, and the first build-operate-transfer (BOT) contract in Jordan. The impressive facilities also allow the plant to generate as much as 95% of its own power requirements from the sludge and hydropower, and hence reduce operational costs.

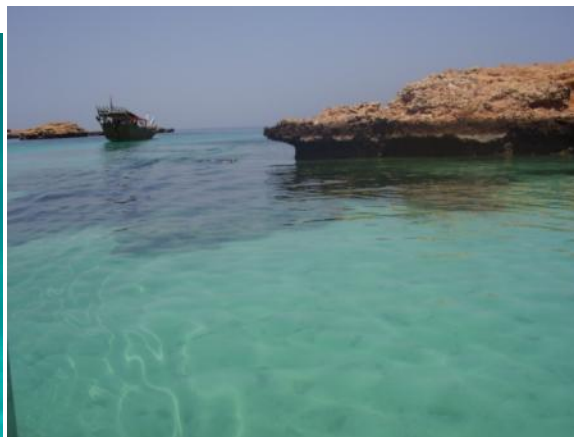


Oman Trip: Yara and I joined OES/Environment and Trade Division colleagues Rob Wing and Laura Gomez for a visit in Oman to start developing a new Plan of Action on U.S.-Oman Environmental Cooperation. We also had an exciting field visit facilitated by the Environment Society of Oman to the sea-turtle nesting site of Damaniyat Islands. I also visited the Middle East Desalination Research Center (MEDRC) outside Muscat.

- **Ministry of Environment:** We met the Ministry of Environment and agreed to develop a new Plan of Action for implementing our Memorandum of Understanding on Environmental Cooperation and plan for a Joint Forum meeting (tentatively targeted for October 2010 in Muscat.)
- **Diwan (Royal Court):** Andrew Spalton, Environmental Advisor at the Diwan, provided some perspectives on environmental challenges in Oman as well as possible priority

areas for inclusion in the next Plan of Action such as sustainable tourism, cleaner production, CITES, and protected area management.

- **Environment Society of Oman (ESO):** As the only environmental NGO in Oman, ESO has gradually been gaining traction in Oman – with some USG support from the Department of Interior’s Fish and Wildlife Service (FWS), EPA, and the Department of State. Varied grants have been provided to ESO over the last few years to support sea-turtle conservation and monitoring efforts at 3 of the top sea-turtle nesting sites in Oman (Masirah Island, Ras al Hadd, and the Damaniyat Islands). FWS experts are expected to visit Oman again in early May to continue training Omani environmental rangers and also participate in the “Sea-Turtle” outreach festival on Masirah island. Another recent MEPI grant to ESO (in partnership with the Oman Women’s Association), aims to raise Omani women’s environmental civic activism and have the participating women convey recommendations on environmental issues to the elected members of the Omani Shura Councils.
- **Field Visit to Damaniyat Islands:** A cluster of about 10 islands, a 2-hour boat-ride away from Muscat, these islands rank among the top 3 nesting sites in the world for the critically endangered hawksbill turtle. We were accompanied by an ESO supported marine biologist who shared the challenges facing this particular turtle species, as well as the nesting patterns at the islands. The biologist also did his own memorable sea-turtle impersonation as he showed how the turtle moves up the beach to find a suitable nesting site at night. We were awakened at 2 am to accompany him as he looked for nesting turtles, but unfortunately missed the 4-5 turtles he later found tracks for. The biologist estimates about 250 turtles nest on these islands annually during the 1-2 month peak nesting season, with a subsequent hatching period of roughly 50 days. Every day, the biologist walks the many beaches of the islands to record the previous days nestings, and also clear the beach to seek the fresh tracks that are made. The FWS has been funding research on the hawksbill, green turtle, and loggerhead turtle monitoring (including some satellite tagging programs) through the Sea Turtle Marine Conservation Act. Though we did not see any nocturnal nesting sea-turtles, we did see quite a few of them swimming in the waters around the islands. It was quite an experience!





Dubai Trip:

- **International Center for Biosaline Agriculture:** I met, Dr. Shawki Barghouti, Director of ICBA in Dubai – one of the CGIAR network institutions. Dr. Shawki, a former DG of ICARDA, is well versed in Middle East Water issues and had good insights to offer regarding the planned USG Water COE. He noted that the private sector will always outpace the public sector in technology and the COE should not try and be a technology center. He strongly advocated the COE serving as a catalyst for the critical water policy reforms needed in the region, to educate Middle East water policy planners and decision makers, and to propagate U.S. and global best practices on water resource management in the Middle East.
- **Arab Youth Venture Foundation (AYVF):** I met Lisa LaBonte, Director of the AYVF, to discuss their collaborations with the USG. Their most current program is sending 12 Emirati university students to work alongside NASA staff for several months. The costs of these exchanges are being covered by varied foundations/private sector. Lisa positioned this exchange as a sterling example of the increased S&T collaboration the U.S. is seeking with the Muslim world.
- **Emirates Green Building Council:** I met Daniel Hajjar, the Vice Chairman of the Emirates GBC (also a Senior VP for HOK in the MENA region), to get an update on the progress of Green buildings in Dubai/Abu Dhabi. After some organizational turmoil, the EGBC with 220 member companies is now moving from a volunteer based organization



to a formal entity with full time staff and offices, and also trying to move from its Dubai focus to inviting participation from all the Emirates. EGBC can now offer LEED exams/accreditations in Dubai, and hopes to eventually be able to certify green buildings in the Emirates to generate revenue. The Dubai municipality has created draft Green building standards recently, and Abu Dhabi has published the ESTIDAMA Urban Planning guidelines (an amalgam of different Green Building standards). Hajjar noted the dramatic slowdown in Dubai construction would perhaps have a positive effect in improving construction and maintenance standards – previously builders were just trying to build and sell quickly without much attention to quality or sustainability. Hajjar did applaud the recently opened Burj Khalifa at 166 stories, as an incredible engineering feat, despite its lack of green features.

Green Embassy Initiative Update: To promote an environmentally friendly workplace, Embassy Amman's Green Team introduced two new initiatives. Water cooler cups will no longer be provided after the Embassy's current stock is exhausted and employees are encouraged to bring their own cups or water bottles to use at the water cooler. The Embassy Club/Association also started offering a 33% discount for anyone who uses a reusable Embassy Amman mug for their morning cup of Joe.

DOI Visit: Yara and I met Kathryn Washburn and Rana Safadi (former Hubster!) during the DOI visit to Amman. We discussed possibilities for additional DOI engagement in Qatar, Tunisia, Morocco, and Egypt. Noting the recent reporting cable on Aqaba marine life impacts from investment activity, DOI offered to provide expertise in coral reef relocation to do an assessment and potentially help ASEZA with their environmental mitigation efforts.

Interesting cables:

Morocco's Strengths for Hosting Renewable Energy Center of Excellence: Morocco's energy institutions, in particular the Agency for Development of Renewable Energy and Energy Efficiency (ADEREE), originally a USAID-supported project, eagerly seek cooperation and engagement with U.S. energy experts and institutions to promote renewable energy technology development and implementation. ADEREE's experience, international linkages, and priorities, along with Morocco's energy needs and investment activities, make ADEREE a logical candidate for a Center of Excellence in renewable energy, as the President called for in his June 4 Cairo speech.

New Investment Company Directs Morocco's Renewable Energy Ambitions: Morocco's planned high-stakes leap to become a world leader in renewable energies will be supported by a new framework of government and semi-government institutions that will direct the research and development, as well as the commercialization and operation of anticipated new projects in all areas of renewable energy. The recently-created Energy Investment Company (SIE) is one of the new government agencies that Morocco hopes will revolutionize government and private sector investment in renewable energies to drive Morocco's energy and economic growth. SIE's new Director General plans to use his position to promote the development and use of renewable energy technologies and to reduce Morocco's poverty and social vulnerability that might otherwise nurture extremism.

Other News:

Jordan Witnessed Growth in Medical Tourism in 2009: The medical tourism sector in Jordan witnessed a rise in patients last year according to the Private Hospitals Association (PHA). According to PHA, private hospitals across the country witnessed a 10 per cent increase in foreign patients in 2009. 220,000 patients from across the world received treatment in the Kingdom's private hospitals last year, up from 200,000 in 2008 and 190,000 in 2007. Iraqis represented the largest number of foreign patients seeking treatment in the Kingdom, accounting for 19 percent, followed by Palestinians (16 percent) and Saudi Arabians (15 per cent). Yemeni patients were fourth, constituting 14 percent of the total, followed by Sudanese and Libyan patients at 13 percent and 9 percent respectively. [Source: The Jordan Times]

USAID's Certified Energy Managers Training Program: The USAID's Sustainable Achievement of Business Expansion and Quality project (SABEQ) organized an Energy

Managers Training Program. In order to develop local demand and expertise for energy and water conservation as well as innovation in the sector, SABEQ is focusing on building the capacity of local specialists to become Certified Energy Managers. The training included 50 Jordanian engineers in the area of energy management in cooperation with the American Energy Engineers Association (AEE).

Rising Sea Levels 'Threaten 6 million Egyptians' with Homelessness: A scientist from Egypt's Ministry of Agriculture warned that Egypt's Nile River delta could be among the world's populated areas most affected by rising sea levels. Hamdi al-Husseini Khalifa, of the ministry's agricultural research centre, told a UN conference on the environment in the Arab world in Alexandria, if sea levels rise by a meter, some 4,500 square kilometers of Nile Delta land could be submerged and some 6 million people could be forced to move. A 2009 report from the University of New South Wales projected that sea levels could rise by more than a meter by 2100. 2007 projections from the United Nation's Intergovernmental Panel on Climate Change warned that sea levels could rise by as much as half a meter in the same period. Egyptian engineer Mamdouh Hamza has proposed a 20-year plan to protect the Nile Delta from rising sea levels including building an underground wall, adding sand to beaches, and expanding Egypt's coastal lakes. [Source: Earth Times]

Egypt White Desert and Farafra Clean Up: From April 29-May 4, an enthusiastic young man named Ahmed Abed will be hosting the annual Desert and springs clean up. This year's clean up will be like last year's- in which 85 people participated. Participants will be divided into groups that will be dispersed all over the White desert over the period of four days, to clean up and enjoy the landscape. Every night, the participants will re-convene in a large camp set up by the Safari Company Rahala and have dinner under the moon light. On the last day, the camp will move to the Farafra oasis and finish the clean up there. [Source: ecooptions Egypt]

Lebanon to Waive Taxes on Hybrid Cars: In the 2010 draft budget the Lebanon government is factoring in exempting companies and individuals from paying import taxes on hybrid cars. This announcement could boost sales of hybrids and all-electric vehicles, especially in oil-less countries where citizens tend to have more modest dealings with environment issues and transport. The World Bank has recently told Lebanon, that environmental degradation will cost it \$560 million annually and have a serious impact on public health due to the number of vehicles that will enter the country. [Source: Daily Star]

Lebanon Looks to "Smart Grid" and Renewable Sources to Generate 12% of Its Electricity by 2020: Addressing a renewable energy forum in Beirut earlier this month, Lebanon's Water and Energy Minister Gebran Bassil cited the need for regulatory changes to facilitate the introduction of renewable energy in the country, but expressed optimism that Lebanon will reach its goal of generating 12% of its electricity through renewable resources by 2020. Bassil applauded the Lebanese government's decision earlier this month to allocate \$9 million for renewable energy projects. The minister announced that Lebanon recently began a study to determine the best locations in the country for wind power generation, with a goal of generating up to 500 MW of power via wind-turbine installations. He called for the initiation of a similar study to map Lebanon for solar energy potential, but noted that Lebanon's relatively small size and high-cost of land constitute the biggest obstacle in this field. [Source: Daily Star]

Syria Brainstorms on Renewable Energy at International Event: Though lacking the resources that have enabled richer Arab states and the UAE in particular, to play a leading role in promoting renewable energy, Syria is also looking to boost its involvement in this field. The Higher Institute for Applied Sciences and Technology (HIAST) in Damascus is

hosting an International Conference on International Energies (ICRE) and Exhibition in April. The 3-day conference aims to bring together international researchers and practitioners working at the cutting-edge of solar energy, as well as related areas such as renewable energy and clean energy. Experts from research centers in Germany, Serbia, Algeria, Saudi Arabia and Jordan presented papers stating that achieving integration among renewable energy sources can guarantee supplying energy to several countries. [ICRE's Website: http://icre.hiast.edu.sy/index.php?option=com_content&task=view&id=5&Itemid=6]

Saudi Arabia and IBM to Develop Solar-powered Desalination Plant: Saudi Arabia announced a partnership with IBM to pursue Harnessing Solar Energy to power its desalination plants. King Abdulaziz City for Science and Technology (KACST), Saudi Arabia's leading R&D institute, will team with IBM to study the possibility of building a solar powered desalination plant in the city of Al Khafji, in the northeast of the country. The solar-powered facility would feature ultra-high concentrator photovoltaic (UHCPV) technology, jointly developed by IBM and KACST, and could provide 30,000 cubic meters of water per day for over 100,000 people. Today, the most common methods used for seawater desalination are thermal technology and reverse osmosis. By bringing these new technologies together, KSA hopes to create an energy-efficient system that can be implemented across Saudi Arabia and around the world. [Source: Arabian Business]

Saudis to Build Middle East's Largest Environmental Tourism Park: Seeking to boost its tourist offerings as part of a wider effort to diversify its sources of revenues, Saudi Arabia announced plans earlier this month to build the largest environmental tourism park in the Middle East. The new project, called Musma Park, is slated for Hail province in north-central Saudi Arabia. According to the website of the Saudi Commission for Tourism and Antiquities, Hail province "is rich with its beautiful natural sites represented in the mountains, deserts, and the botanical and zoological life ... there are some caves, craters, and beautiful plateaus with great scenery and soft breeze." Islamic tourism – the *hajj* or *umrah* – currently accounts for much of the kingdom's tourism traffic. New tourist developments such as Musma Park and a series of projects on the Red Sea coast are



intended to serve as a "Mecca" for tourists who come for reasons unrelated to religion. [Source: Saudi Commission for Tourism and Antiquities]

Saudi Arabia Creates City for Nuclear and Renewable Energy:

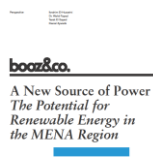
Saudi Arabia will establish a renewable energy 'city' to meet the country's growing energy needs and reduce its dependence on fossil fuels. King Abdullah bin Abdulaziz issued a royal decree earlier this month (17 April) ordering the creation of the King Abdullah City for Atomic and Renewable Energy (KACARE), based in Riyadh, with offshoots across the country. KACARE's work

will support scientific research and development, training programs and conferences, and co-ordination of the country's renewable energy centers. It will be responsible for drafting a national policy on nuclear energy development, and supervising all commercial uses of nuclear power and handling of radioactive waste. KACARE will represent Saudi Arabia at the IAEA. Saudi Arabia's renewable energy plans — like those of other member states of the Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar and the United Arab Emirates) — focus on solar and nuclear energy. The council is currently preparing a regional nuclear power and desalination program in cooperation with the IAEA. Last month (17 March) the United Arab Emirates announced plans to establish the Gulf Nuclear Energy Infrastructure

Institute, in Abu Dhabi. This educational institution will provide civilian nuclear-energy programs in the Gulf region with a source of local nuclear-energy professionals. [Source: SciDev.net]

“Enviromena” Solar Company Awarded Environmental Prize: This year, Abu Dhabi’s solar developer Enviromena Power Systems won the “Sustainable Development of the Environment Award” at the Takreem Arab Achievement Awards held in Beirut. Hosted by Al Jazeera’s star Laila Al-Shaikhli, in Beirut, the awards were to honor achievements in the Arab world. Presented at a gala dinner of over 500, the winners met with Lebanese President Michel Suleiman the following day, and included Prince El Hassan bin Talal of Jordan on the jury committee as well as former United Nations Secretary General Boutros Butros-Ghali. For Enviromena, the award is icing on the cake. In the last year, it won a number of Middle East based awards including “Power Plant Operator of the Year” and “Energy Efficiency Awards” at the Middle East Power and Water Awards. The company, it reports, also completed the largest grid connected solar power plant in the Middle East, the Masdar 10MW Solar Plant in June last year. [Source: Green prophet]

EAD's Secretary General Wins Geospatial Pioneer Award: Majid Al Mansouri, Secretary General of Environment Agency of Abu Dhabi (EAD), has won the Geospatial Pioneer Award for his valuable contributions to geospatial technologies and pioneering work in the field of Environmental Analysis and Management for the past 15 years. The ceremony took place at Map Middle East 2010 and the 6th edition of the Annual Middle East Conference and Exhibition on Geospatial Information Technology and Applications, held recently in Abu Dhabi. Al Mansouri was recognized as one of the pioneers in the field of environmental analysis and management. EAD supported the organization of the three-day conference and exhibition, which is being organised by GIS Development Pvt. Ltd. in cooperation with Space Reconnaissance Centre, UAE. This annual event is an international platform designed to bring together the geospatial community to encourage geospatial related ties and collaborations at national, regional and global levels for the overall growth of geospatial industry in the region. [Source: Embassy Abu Dhabi]



A New Source of Power: The Potential for Renewable Energy in the MENA Region: The attached Booz & Company report outlines the potential of renewable energy sources in the MENA region.

FUTURE EVENTS:

April 11 – May 1, Arizona: USFS IP International Seminar on Watershed Management
<http://www.fs.fed.us/global/is/watershed/welcome.htm>

April 19 – 21, Beirut: GLOBE regional training event

April 22 – 23, Beirut: GLOBE Regional Meeting of Country Coordinators

April 27, Amman: Practical Low Solutions to Greening your Business Session

<http://sadda.jo/Campaign/gogreen.jpg>

April 27 – May 7, San Francisco: The National Parks Institute: Leading Strategic Change Intensive Management Seminar <http://parkleadership.ucmerced.edu/>

April 28 – 29, Cairo: Exploring Win-Win Strategies for Sustainable Local Development: A MENA Initiative on Poverty-Environment Mainstreaming Conference

May 3-4, Abu Dhabi: Women in Science Workshop (Masdar, DOS, NSF)

May 4-5, Cairo: MENASOL 2010, 2nd North Africa and Middle East Solar Conference
<http://www.newsolartoday.com/solar%2Dconference/>

May 3-6, Amman: Jordan Sustainability Week
http://www.ifpjordan.com/exhibition_overview.php?id=142

May 9-13, Muscat: DOE/NNSA Event "Regional Energy Planning and Nonproliferation Workshop"

May, tbd, Cairo: U.S.-Egypt S&T Board Meeting

May 16-18, Doha: 5th workshop on Radiation Measurements Cross Calibration (RMCC)

May 18-19, Amman: Think Green 3 Conference, www.thinkgreenconf.com

May 24-26, Abu Dhabi: Greenbuild Middle East and World Expo,
www.greenbuildmiddleeast.com

May 24-26, Cairo: MENA Power – USTDA/DOS/FCS sponsored event to match policy makers in electric power sector with U.S. solution providers. www.trademeetings.com

July 12-15, Amman: Sustainable Architecture and Urban Development Conference

September 20 – 22, Amman: Global Green Techies Forum and Exhibition

November 02 – 04, Amman: ME Expo & Conference on Environmental Management & Technologies <http://www.emtme.com/>

November 02 – 04, Amman: GreenBuild Arabia 2010 Conference and Expo

November 15 – 17 (T), Abu Dhabi: "Eye on Earth" summit

TBD, Amman: The First Middle East Expo & Conference on Environmental Management & Technologies <http://www.emtme.com>

TBD, Amman: The First International Conference on Environmental Management & Technologies <http://icemt10.emtme.com>

TBD, Amman: Green Build Arabia 2010 Expo & Conference
<http://www.greenbuildarabia.com>